

What is claimed is:

1. A method of driving a plasma display panel having one frame divided into a plurality of sub-fields for its driving, comprising the steps of:

applying a first driving waveform to said sub-fields at a temperature more than a low temperature; and

applying a second driving waveform different from the first driving waveform to said sub-fields at the low temperature.

2. The method as claimed in claim 1, wherein each of said sub-fields includes an initialization period, which is divided into a set-up interval for forming wall charges at a discharge cell and a set-down interval for erasing a portion of the wall charges formed in the set-up interval.

3. The method as claimed in claim 2, wherein said first and second driving waveforms are set such that the waveforms applied in the set-up interval are different from each other while the waveforms applied in the other interval are identical to each other.

4. The method as claimed in claim 2, further comprising the steps of:

applying a rising ramp waveform to a scan electrode provided at each discharge cell during the set-up interval when said first driving waveform is supplied;

applying a ground voltage to a common sustain electrode provided, in parallel with the scan electrode, at each discharge cell in the first half of the set-up interval; and

floating the sustain electrode in the second half of

the set-up interval.

5. The method as claimed in claim 2, further comprising the steps of:

applying a rising ramp waveform to a scan electrode provided at each discharge cell during the set-up interval when said second driving waveform is supplied; and

applying a ground voltage to a common sustain electrode provided, in parallel with the scan electrode, at each discharge cell.

6. The method as claimed in claim 2, wherein said low temperature is 20°C to -50°C.

7. A method of driving a plasma display panel in which an initialization period included in each sub-field is divided into a set-up interval and a set-down interval for its driving, comprising the steps of:

displaying a picture on the panel;

sensing a driving temperature of the panel; and

setting a driving waveform to be applied in the set-up interval in correspondence with said driving temperature of the panel.

8. The method as claimed in claim 7, wherein a driving waveform supplied when said driving temperature of the panel is a low temperature is set differently from a driving waveform supplied when said driving temperature of the panel is more than the low temperature.

9. The method as claimed in claim 8, further comprising the steps of:

applying a rising ramp waveform to a scan electrode

provided at each discharge cell during the set-up interval when said driving temperature of the panel is said low temperature; and

applying a ground voltage to a common sustain electrode provided, in parallel with the scan electrode, at each discharge cell.

10. The method as claimed in claim 8, further comprising the steps of:

applying a rising ramp waveform to a scan electrode provided at each discharge cell during the set-up interval when said driving temperature of the panel is a temperature more than said low temperature;

applying a ground voltage to a common sustain electrode provided, in parallel with the scan electrode, at each discharge cell in the first half of the set-up interval; and

floating the sustain electrode in the second half of the set-up interval.

11. A driving apparatus for a plasma display panel in which an initialization period included in each sub-field is divided into a set-up interval and a set-down interval for its driving, comprising:

a temperature sensor for sensing a driving temperature of the panel;

a switching device provided between a plurality of common sustain electrodes provided at the panel and a ground voltage source; and

a timing controller for controlling a turning-on and a turning-off of the switching device in correspondence with a temperature inputted from the temperature sensor.

12. The driving apparatus as claimed in claim 11, wherein said timing controller differently controls said turning-on and said turning-off of the switching device when a driving temperature inputted from the temperature sensor is a low temperature and when a driving temperature inputted from the temperature sensor is a temperature more than the low temperature.

13. The driving apparatus as claimed in claim 12, wherein said timing controller turns on the switching device in the first half of the set-up interval while turning off the switching device in the second half of the set-up interval to float the common sustain electrode when a driving temperature inputted from the temperature sensor is more than said low temperature.

14. The driving apparatus as claimed in claim 12, wherein said timing controller turns on the switching device during the set-up interval when a driving temperature inputted from the temperature sensor is said low temperature.

15. The driving apparatus as claimed in claim 11, further comprising:

- a sustain driver for driving the common sustain electrode;

- a scan driver for driving a plurality of scan electrodes provided in parallel with the common sustain electrode; and

- a data driver for driving a plurality of address electrode provided in a direction crossing the common sustain electrode,

- wherein said timing controller controls the sustain

driver, and the scan driver and the data driver.

16. A driving apparatus for a plasma display panel in which an initialization period included in each sub-field is divided into a set-up interval and a set-down interval for its driving, comprising:

- a temperature sensor for sensing a driving temperature of the panel;

- a switching device provided between a plurality of common sustain electrodes provided at the panel and a ground voltage source; and

- a switch controller for controlling a turning-on and a turning-off of the switching device in correspondence with a temperature inputted from the temperature sensor.

17. The driving apparatus as claimed in claim 16, wherein said switch controller differently controls said turning-on and said turning-off of the switching device when a driving temperature inputted from the temperature sensor is a low temperature and when a driving temperature inputted from the temperature sensor is more than the low temperature.

18. The driving apparatus as claimed in claim 17, wherein said switch controller turns on the switching device in the first half of the set-up interval while turning off the switching device in the second half of the set-up interval to float the common sustain electrode when a driving temperature inputted from the temperature sensor is more than said low temperature.

19. The driving apparatus as claimed in claim 17, wherein said switch controller turns on the switching device

during the set-up interval when a driving temperature inputted from the temperature sensor is said low temperature.